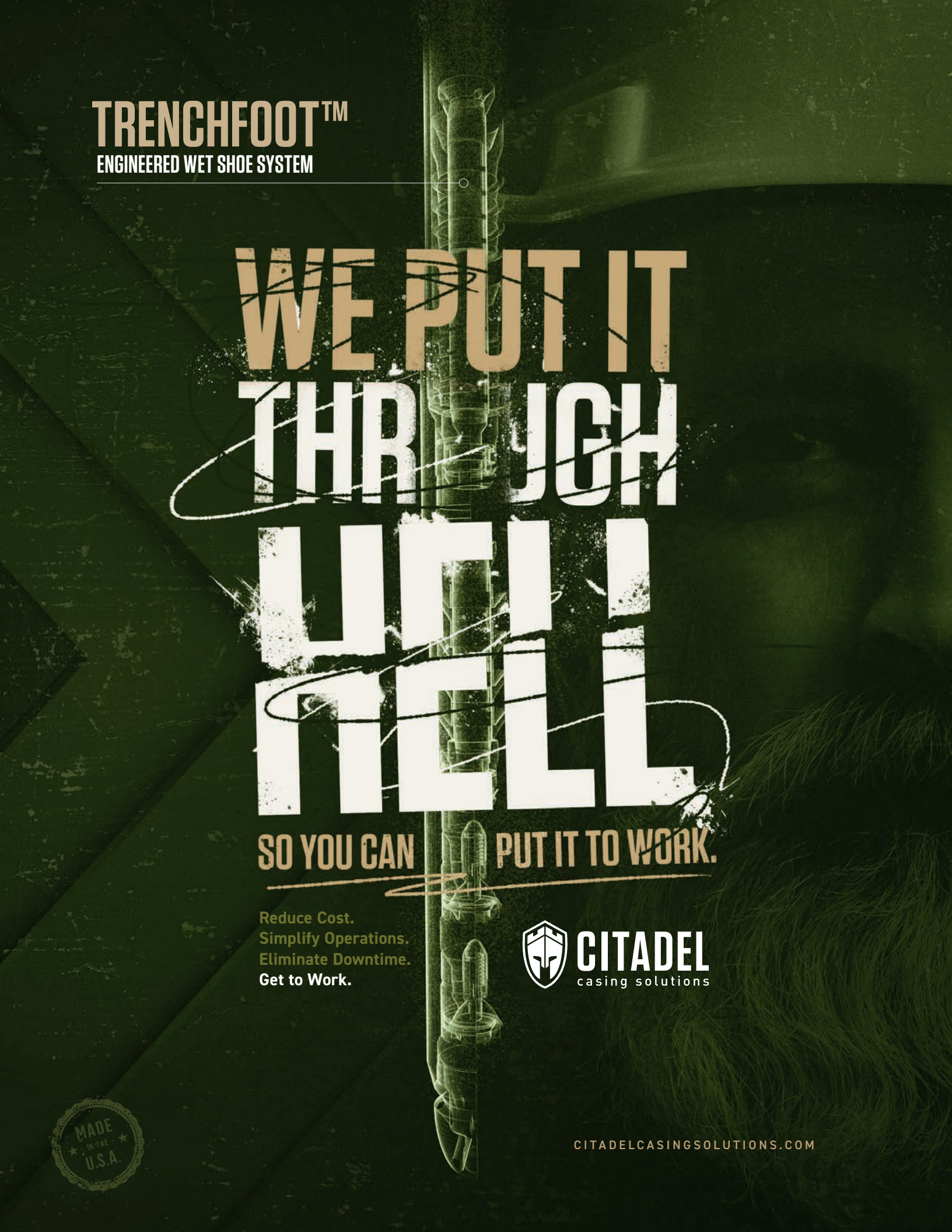
TRENCHFOOT™
ENGINEERED WET SHOE SYSTEM
WE PUT IT THROUGH HELL
SO YOU CAN PUT IT TO WORK.
Reduce Cost.
Simplify Operations.
Eliminate Downtime.
Get to Work.
CITADEL
casing solutions
MADE IN THE U.S.A.
CITADELCASINGSOLUTIONS.COM

CITADEL CASING SOLUTIONS | MADE IN THE USA

TRENCHFOOT™ ENGINEERED WET SHOE SYSTEM

Zero Compromise Toe Initiation Solution

Citadel Casing Solutions' TRENCHFOOT™ Engineered Wet Shoe system is a fully optimized toe initiation mechanism that provides an initial flow path through the shoe for plug and perf operations. The system consolidates all casing accessories into a single tool with a single casing connection which reduces cost, simplifies operations/logistics on location, and eliminates reliability issues with complex toe initiation mechanisms.

99.7% injection reliability
98.5% CIT reliability

Per well NPV uplift[1]
$50k to $500k

Per well AFE savings[2]
$8,000 to $40,000

Low frac pressure formations
18-20 bpm @ 6000 psi

High frac pressure formations
15-18 bpm @ 10000 psi

FEATURES

- Available for liner and long string applications
- Gas-tight 338 ULTRA MAG 2.0 float valve qualified as independent mechanical barrier
- Thousands of successful installations across North & South America
- SPE-201264-MS – "Qualification and Deployment of Float Equipment as an Independent Mechanical Barrier in Unconventional Wells"

1Total NPV uplift = KBOE/FT x $/KBOE x added production
2Total AFE Savings = cost of toe valve(s) + accessory threads + casing + rig time – TrenchFoot™ system cost

"MAJOR OPERATOR" CONVENTIONAL SHOE TRACK

Length: 180 ft

- Configuration: float shoe + full joint + full joint + float collar + full joint + pup joint + toe valve + pup joint + pup joint + toe valve + pup joint
- Inaccessible Completable Reservoir: 80' (100' completion hardline)
- Must drill to lease line (100' unnecessary drilled depth)

VS.

CITADEL TRENCHFOOT™ WET SHOE SYSTEM

Length: 4 to 8 ft
100% access to completable reservoir
Optimized BHA:

- Replaces toe valve(s) at $6k to $30k
- A single casing connection eliminates $3k to $12k in premium accessory threads
- Eliminates 100+ ft of hardest lateral to drill – could eliminate a bit trip

Pressure Testable System

- Testable up to 15 ksi
- Testable during toe prep or immediately at the conclusion of cementing
- Redundant test mechanisms
- Customized to application specific requirements

For more info contact us at
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